

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2219
ANSWERED ON 08/08/2023

CAPACITY OF SOLAR POWER GENERATION

2219. SHRI PARIMAL NATHWANI

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the total installed capacity of solar power generation in the country, the details thereof, State-wise;
- (b) the data of solar power generation vis-à-vis the installed capacity, State-wise;
- (c) whether the country has tapped the solar energy potential fully or there still lies the scope to develop the same further, if so, the details thereof; and
- (d) whether there are plans to set up more commercial solar power plants in the country, if so, the details thereof?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

- (a) & (b) As on 30.06.2023, a cumulative solar power capacity of 70,096 MW has been installed in the country. The State/UT-wise details of cumulative solar capacity installed and solar power generated in 2022-23 are given at **Annexure-I.** and **Annexure-II** respectively.
- (c) The country has an estimated solar power potential of 7,48,990 MW. Hence, the potential of solar energy is not fully tapped, so far. The Government is making efforts to harness the available potential through various schemes & programs. Several steps taken by the Government to promote renewable energy, including solar energy, in the country are given at **Annexure-III.**
- (d) Solar projects are developed largely through private investments by the project developers selected through tariff-based competitive bidding, for captive consumption, and third-party sale, etc. At present 55.90 GW solar projects are under implementation.

**ANNEXURE-I REFERRED TO IN REPLY TO PART (a) &(b) OF RAJYA SABHA
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STATE/UT-WISE DETAILS OF CUMULATIVE SOLAR CAPACITY INSTALLED

Sr. No.	State/UT	Cumulative Solar Capacity till 30-06-2023 (MW)
1	Andaman & Nicobar	29.91
2	Andhra Pradesh	4552.12
3	Arunachal Pradesh	11.75
4	Assam	155.70
5	Bihar	203.18
6	Chandigarh	63.59
7	Chhattisgarh	962.51
8	Dadra & Nagar Haveli	5.46
9	Daman & Diu	41.01
10	Delhi	227.73
11	Goa	33.74
12	Gujarat	10133.66
13	Haryana	1106.49
14	Himachal Pradesh	106.55
15	Jammu & Kashmir	53.29
16	Jharkhand	119.34
17	Karnataka	9050.59
18	Kerala	802.16
19	Ladakh	7.80
20	Lakshadweep	3.27
21	Madhya Pradesh	3021.57
22	Maharashtra	4870.64
23	Manipur	12.43
24	Meghalaya	4.15
25	Mizoram	30.43
26	Nagaland	3.04
27	Odisha	458.88
28	Puducherry	43.26
29	Punjab	1190.58
30	Rajasthan	17839.98
31	Sikkim	4.69
32	Tamil Nadu	6892.81
33	Telangana	4695.21
34	Tripura	18.06

Sr. No.	State/UT	Cumulative Solar Capacity till 30-06-2023 (MW)
35	Uttar Pradesh	2526.61
36	Uttarakhand	575.53
37	West Bengal	194.06
38	Others including NABARD	45.01
Total		70096.78

**ANNEXURE-II REFERRED TO IN REPLY TO PART (a) &(b) OF RAJYA SABHA
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STATE/UT-WISE DETAILS OF SOLAR POWER GENERATED IN 2022-23

Sr. No.	State/UT	SOLAR POWER GENERATED IN 2022-23 (MU)
1	Andaman & Nicobar	23.94
2	Andhra Pradesh	8140.72
3	Arunachal Pradesh	22.27
4	Assam	216.35
5	Bihar	169.53
6	Chandigarh	12.61
7	Chhattisgarh	635.42
8	Dadra & Nagar Haveli	27.40
9	Daman & Diu	
10	Delhi	236.11
11	Goa	14.87
12	Gujarat	10335.32
13	Haryana	555.20
14	Himachal Pradesh	58.76
15	Jharkhand	19.70
16	Karnataka	14153.79
17	Kerala	879.75
18	Lakshadweep	.10
19	Madhya Pradesh	3839.30
20	Maharashtra	4387.85
21	Manipur	8.17
22	Mizoram	3.21
23	Odisha	706.24
24	Puducherry	12.24
25	Punjab	2778.66
26	Rajasthan	34474.43
27	Tamil Nadu	9419.39
28	Telangana	6745.46
29	Tripura	6.58
30	Uttar Pradesh	3674.02
31	Uttarakhand	331.80
32	West Bengal	125.04
33	Others including NABARD	-
Total		102014.23

**ANNEXURE-III REFERRED TO IN REPLY TO PART (c) OF RAJYA SABHA
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**STEPS TAKEN TO PROMOTE RENEWABLE ENERGY INCLUDING SOLAR
ENERGY IN THE COUNTRY**

- Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025,
- Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029-30,
- Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power,
- Notification of standards for deployment of solar photovoltaic system/devices,
- Setting up of Project Development Cell for attracting and facilitating investments,
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.
- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.
- Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.
- Notification of "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules).
- Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.
- Bidding trajectory for renewable energy projects through Renewable Energy Implementing Agencies have been issued.
- National Green Hydrogen Mission launched with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.